



ENERGY STAR[®] Certified Homes Construction Kit

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Justin Mackovyak, ICF International on
behalf of the U.S. EPA



Question: What is the biggest hurdle in achieving ENERGY STAR Certification?

Answer: Communication

- Executive management commits to building ENERGY STAR Certified Homes.
- Marketing unsure how to sell ENERGY STAR.
- Purchasing department responsible for digesting a number of new specs and keeping construction costs low.
- Field supervisors are often left out of the initial conversations, are not told the benefits of ENERGY STAR, and now have a new set of requirements. They end up seeing this as another hurdle to getting their job done.



ENERGY STAR Certified Homes Builder Sales Kit

Selling the Value of ENERGY STAR[®] Certified Homes





ENERGY STAR Certified Homes Construction Kit

- Comprehensive training package for the production team including purchasing managers, project managers, and field supervisors.
- Self-guided curriculum meant to be conducted by an experienced HERS rater, production manager, or utility program subject matter expert.
- Will contain several reference documents including a training manual, activities, and presentation materials.

Focus on the process...

1. Key take-away items from the design phase.
2. Important considerations for the purchasing/buyout phase.
3. Closing the gap at the field supervisor level.



Building ENERGY STAR – Framing (Multifamily Common Wall Gap)



Air sealing must occur where the floor systems meet the core wall assembly. This is a common failure point in townhome construction and should be addressed prior to any exterior cladding. This area is very difficult to reach from the interior of the home.

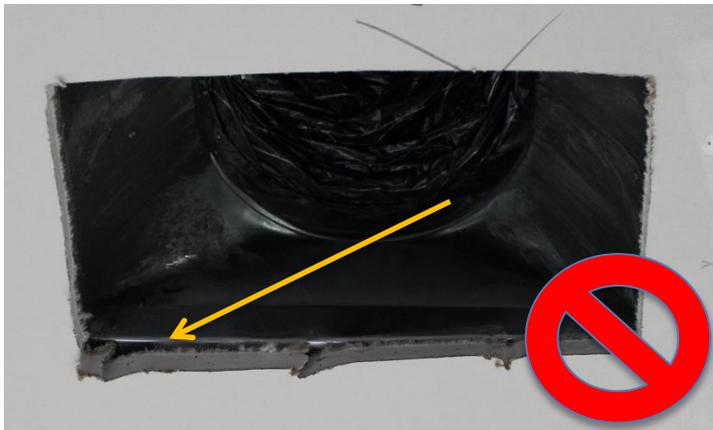


Building ENERGY STAR – Framing (Multifamily Common Wall Gap)

- **Specification:** Exterior Air Sealing, Common Wall
- **Purchasing Guidance:** Areas where multifamily core walls are installed are commonly overlooked infiltration points. Labor and materials should be included in framing scope and framing lumber packages.
- **Field Guidance:** Core wall installation areas should be air sealed prior the installation of any siding or veneer. Pay particular attention to areas around the flooring system which cannot be accessed from inside of the home.
- **Homeowner Benefit:** Air sealing of the home ensures maximum energy efficiency and comfort by keeping conditioned air in and unconditioned air out.

Building ENERGY STAR – Post-Drywall Air Sealing

- **Specification:** HVAC Supply and Return Boots
- **Key Players:** Purchasing Manager, Field Supervisor, Painter, HVAC Subcontractor, or Punch Labor
- HVAC supply and return boots must be sealed to drywall or subfloor with caulk or foam.



Supply boot not properly sealed to drywall will cause issues with duct leakage and infiltration testing.



Supply boot properly sealed with caulk.



Building ENERGY STAR – Post-Drywall Air Sealing

- **Specification:** HVAC Supply and Return Boots
- **Purchasing Guidance:** Caulking of HVAC boots to drywall should be included in the HVAC contractor or painter's subcontract. Otherwise, the task must be completed by punch out labor.
- **Field Guidance:** This task is especially important in passing final duct leakage and infiltration testing. Verify that work has been completed prior to final inspection with HERs Rater.
- **Homeowner Benefit:** Sealing duct boots ensures that conditioned air is delivered to the appropriate areas, not interstitial or unconditioned space. This increases individual room comfort and overall efficiency of the home.



ENERGY STAR Certified Homes

Web:

Main: www.energystar.gov/newhomespartners
Technical: www.energystar.gov/newhomesguidelines
Training: www.energystar.gov/newhomestraining
HVAC: www.energystar.gov/newhomesHVAC

Email: energystarhomes@energystar.gov

Social Media:



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